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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,941	01/22/2002	David Hall	15186-24US JA/AD/MB	3864
20988	7590	05/24/2004	EXAMINER	
OGILVY RENAULT 1981 MCGILL COLLEGE AVENUE SUITE 1600 MONTREAL, QC H3A2Y3 CANADA			SMITH, RUTH S	
			ART UNIT	PAPER NUMBER
			3737	7

DATE MAILED: 05/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/050,941

Applicant(s)

HALL ET AL.

Examiner

Ruth S Smith

Art Unit

3737

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-7,10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chance in view of Levitt. Chance discloses a system and method of optical imaging using time and frequency domain measurements to evaluate medical conditions using light from a tunable laser, a plurality of wavelengths injected at one or more positions, switching to direct the light at a plurality of injection ports and detection at multiple positions. Chance fails to disclose the use of simultaneous detection at multiple wavelengths. Levitt discloses multiple simultaneous optical measurements. The measurements can be any type of time-domain parameter such as wavelength. The input signals may be light and the carrier signal may also be optical. It would have been obvious to one skilled in the art to have modified Chance such that the detection of the multiple wavelengths takes place simultaneously as disclosed by Levitt. The advantage of such is to reduce data acquisition time and provide more enhanced data as disclosed by Levitt.

Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Feng et al in view of Levitt. Feng et al disclose a system and method of optical imaging

using time and frequency domain measurements of diffusion of photons using multiple wavelengths provided by a plurality of laser sources, switching between multiple injection ports, and detection with CCD camera and bandpass filter. . Feng et al fail to disclose the use of simultaneous detection at multiple wavelengths. Levitt discloses multiple simultaneous optical measurements. The measurements can be any type of time-domain parameter such as wavelength. The input signals may be light and the carrier signal may also be optical. The system of Levitt is considered to include a wavelength selection device in that it will separate the detected wavelengths. It would have been obvious to one skilled in the art to have modified Feng et al such that the detection of the multiple wavelengths takes place simultaneously as disclosed by Levitt. The advantage of such is to reduce data acquisition time and provide more enhanced data as disclosed by Levitt.

Claims 8-9,14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chance in view of Levitt and Feng et al. Chance discloses a system and method of optical imaging using time and frequency domain measurements to evaluate medical conditions using light from a tunable laser, a plurality of wavelengths injected at one or more positions, switching to direct the light at a plurality of injection ports and detection at multiple positions. Chance fails to disclose the use of simultaneous detection at multiple wavelengths. Levitt discloses multiple simultaneous optical measurements. The measurements can be any type of time-domain parameter such as wavelength. The input signals may be light and the carrier signal may also be optical. It would have been obvious to one skilled in the art to have modified Chance such that the detection of the multiple wavelengths takes place simultaneously as disclosed by Levitt. The advantage of such is to reduce data acquisition time and provide more enhanced data as disclosed by Levitt. Chance discloses optical detection using semiconductor devices but fails to disclose detection with a CCD camera and filtering. Feng et al disclose a system and method of optical imaging using time and frequency domain measurements of diffusion of photons using multiple wavelengths provided by a plurality of laser sources, switching between multiple injection ports, and detection with CCD camera and bandpass filter. It would have been obvious to one skilled in the art to have

further modified Chance such that it employs the well known detection means as taught by Feng et al with the imaging device taught by Chance. Such a modification merely involves the substitution of one well known type of detection device for another.

***Response to Arguments***

Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth S Smith whose telephone number is (703) 308-3063. The examiner can normally be reached on M-F 5:30 AM- 2:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (703) 308-5181. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Ruth S Smith  
Primary Examiner  
Art Unit 3737

RSS